

Media Release

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Temperature sensor for automotive applications now available

Sensirion announces the STS4xA, a highly reliable digital temperature sensor series specifically designed for automotive applications. The sensor platform supports automated optical inspection and comes with an advanced on-board diagnosis system.

Stäfa, Switzerland – Sensirion is adding the digital automotive sensor STS4xA to its wide range of temperature sensors. The STS4xA series currently consists of two versions: STS41A-AD1B and STS41A-AW1B, with the latter offering optional wettable flank packaging to support automated optical inspection (AOI). Moreover, the integrated on-chip heater enables advanced on-board diagnosis (OBD), making it possible to perform a functionality and plausibility diagnosis instead of simple presence checks.

“The expansion of our next-generation temperature sensor series means more opportunities for our customers to benefit from high precision and reliability in automotive applications. Our STS4xA temperature sensor builds on the established foundation of the STS4x sensor family, delivering a wide supply voltage range and low current consumption while maintaining top performance”, says Matthias Scharfe, Product Manager for Humidity and Temperature Sensors at Sensirion.

The sensor platform is based on Sensirion’s CMOSens® Technology and draws on Sensirion’s extensive experience in temperature sensing, thus benefiting from the company’s well-established engineering expertise. The cost-efficient STS4xA features an I²C interface and provides a wide supply voltage range. Thanks to its small size and four-pin dual-flat no-leads (DFN) package, the STS4xA can easily be integrated into a variety of automotive applications. Moreover, it meets relevant industry standards, such as 85 °C/85 % RH accelerated life tests.

Specifications

Typ. Temperature accuracy	0.3 °C
Operating temperature range	-40 - 125 °C
Response time (τ63%)	2 s
Supply voltage	2.3 – 5.5 V
Package size	1.5 x 1.5 x 0.5 mm ³

Find out more information about Sensirion’s STS4xA temperature sensor [here](#).

About Sensirion – Experts for Environmental and Flow Sensor Solutions

Sensirion is one of the world’s leading developers and manufacturers of sensors and sensor solutions that improve efficiency, health, safety, and comfort. Founded in 1998, Sensirion now employs around 1’000 people at its headquarters in Stäfa, Switzerland and in numerous international subsidiaries. Sensirion sensors can be used to measure a wide range of environmental parameters and flow rates precisely and reliably. The company’s aim is to make the world smarter with pioneering sensor technology. As a pioneer in innovation, Sensirion develops solutions for the specific needs of customers and partners from the automotive, industrial, medical technology and consumer electronics markets, as well as high-quality products for cost-efficient mass production. More information and current key figures at www.sensirion.com.